

**WHAT IS CLAIMED IS:**

1           1. A method comprising:  
2           detecting a docking device class circuit present on a bus; and  
3           obtaining a description of at least one device in a docking station from the  
4           docking device class circuit.

1           2. The method of Claim 1, further comprising:  
2           controlling the at least one device via commands appropriate to the bus.

1           3. The method of Claim 2, wherein the bus comprises at least one  
2           Universal Serial Bus, at least one Peripheral Component Interconnect Bus, or at least  
3           one AT bus, or at least one wireless bus, or at least one optical bus.

1           4. The method of Claim 2, wherein said controlling the at least one  
2           device via commands appropriate to the bus further comprises:  
3           controlling at least one device associated with docking.

1           5. The method of Claim 2, wherein said controlling the at least one  
2           device via commands appropriate to the bus further comprises:  
3           controlling at least one power supply in a docking station.

1           6. The method of Claim 5, wherein said controlling at least one power  
2           supply in a docking station further comprises:  
3           activating a power supply having voltage appropriate to a portable computer  
4           system.

1           7. The method of Claim 2, wherein said controlling the at least one  
2           device via commands appropriate to the bus further comprises:  
3           controlling at least one power rail that supplies power to a portable computer  
4           system.

1           8. The method of Claim 1, wherein said detecting a docking device class  
2           circuit present on a bus further comprises:  
3           detecting an identifier associated with the docking device class circuit.

1           9.     The method of Claim 8, wherein said detecting an identifier associated  
2 with the docking device class circuit further comprises:

3                 detecting an identification number reserved for the docking device class  
4                 circuit.

1           10.    The method of Claim 1, wherein said obtaining a description of at least  
2 one device in a docking station from the docking device class circuit further  
3 comprises:

4                 obtaining a list of devices under the control of the docking device class circuit.

1           11.    The method of Claim 10, wherein said obtaining a list of devices under  
2 the control of the docking device class circuit further comprises:

3                 obtaining a list of devices under the control of a general purpose I/O device  
4                 under the control of the docking device class circuit.

1           12.    The method of Claim 10, wherein said obtaining a list of devices under  
2 the control of the docking device class circuit further comprises:

3                 obtaining driver code appropriate to the at least one device.

1           13.    The method of Claim 10, wherein said obtaining a list of devices under  
2 the control of the docking device class circuit further comprises:

3                 obtaining driver code appropriate to the docking device class circuit.

1           14.    The method of Claim 10, wherein said obtaining a list of devices under  
2 the control of the docking device class circuit further comprises:

3                 obtaining driver code combination set appropriate to both the docking device  
4                 class circuit and the at least one device.

1           15.    The method of Claim 1, wherein said obtaining a description of at least  
2 one device in a docking station from the docking device class circuit further  
3 comprises:

4                 obtaining a bus description table from the docking device class circuit.

1           16.    The method of Claim 15, wherein said obtaining a bus description  
2 table from the docking device class circuit further comprises:

3           obtaining a description of at least one Peripheral Component Interconnect bus  
4           resident within a docking device, or at least one Universal Serial Bus  
5           resident within a docking device, or at least one Accelerated Graphics  
6           Port Bus resident within a docking device, or at least one AT bus  
7           resident within a docking device, or at least one proprietary bus, or at  
8           least one wireless bus, or at least one optical bus.

1       17. A docking station comprising:  
2           a docking device class circuit.

1       18. The docking station of Claim 17, further comprising:  
2           the docking device class circuit operably coupled to a device associated with  
3           docking.

1       19. The docking station of Claim 18, further comprising:  
2           the docking device class circuit operably coupled to at least one device  
3           associated with ad hoc functions or at least one power supply device.

1       20. The docking station of Claim 17, further comprising:  
2           the docking device class circuit operably coupled to a general purpose I/O  
3           controller.

1       21. The docking station of Claim 17, said docking device class circuit  
2           further comprising:  
3           the docking device class circuit having a bus description table.

1       22. The docking station of Claim 17, further comprising:  
2           at least one optical connector or at least one wireless connector.

1       23. A data processing system comprising:  
2           circuitry for detecting a docking device class circuit present on a bus, wherein  
3           said circuitry for detecting includes one or more electrical circuits  
4           selected from the group including but not limited to electrical circuits  
5           having at least one discrete electrical circuit, electrical circuits having  
6           at least one integrated circuit, electrical circuits having at least one

7 application specific integrated circuit, and electrical circuits providing  
8 a general purpose computing device configurable by a computer  
9 program;

10 circuitry for obtaining a description of at least one device in a docking station  
11 from the docking device class circuit, wherein said circuitry for  
12 obtaining includes one or more electrical circuits selected from the  
13 group including but not limited to electrical circuits having at least one  
14 discrete electrical circuit, electrical circuits having at least one  
15 integrated circuit, electrical circuits having at least one application  
16 specific integrated circuit, and electrical circuits providing a general  
17 purpose computing device configurable by a computer program; and  
18 at least one of said circuitry for detecting, and said circuitry for obtaining  
19 operably coupled, either directly or through one or more intermedial  
20 circuits, to at least one data processing system component selected  
21 from the group including a processor device, a display device, a  
22 memory device, and a communication device.

1 24. The data processing system of Claim 23, further comprising:  
2 circuitry for controlling the at least one device via commands appropriate to  
3 the bus, wherein said circuitry for controlling includes one or more  
4 electrical circuits selected from the group including but not limited to  
5 electrical circuits having at least one discrete electrical circuit,  
6 electrical circuits having at least one integrated circuit, electrical  
7 circuits having at least one application specific integrated circuit, and  
8 electrical circuits providing a general purpose computing device  
9 configurable by a computer program.

1 25. The data processing system of Claim 24, wherein the bus comprises at  
2 least one Universal Serial Bus, at least one Peripheral Component Interconnect Bus,  
3 or at least one AT bus, or at least one wireless bus, or at least one optical bus.

1 26. The data processing system of Claim 24, wherein said circuitry for  
2 controlling the at least one device via commands appropriate to the bus further  
3 comprises:

4           circuitry for controlling at least one device associated with docking.

1       27.   The data processing system of Claim 24, wherein said circuitry for  
2   controlling the at least one device via commands appropriate to the bus further  
3   comprises:

4           circuitry for controlling at least one power supply in a docking station.

1       28.   The data processing system of Claim 27, wherein said circuitry for  
2   controlling at least one power supply in a docking station further comprises:  
3           circuitry for activating a power supply having voltage appropriate to a portable  
4           computer system.

1       29.   The data processing system of Claim 24, wherein said circuitry for  
2   controlling the at least one device via commands appropriate to the bus further  
3   comprises:

4           circuitry for controlling at least one power rail that supplies power to a  
5           portable computer system.

1       30.   The data processing system of Claim 23, wherein said circuitry for  
2   detecting a docking device class circuit present on a bus further comprises:  
3           circuitry for detecting an identifier associated with the docking device class  
4           circuit.

1       31.   The data processing system of Claim 30, wherein said circuitry for  
2   detecting an identifier associated with the docking device class circuit further  
3   comprises:  
4           circuitry for detecting an identification number reserved for the docking  
5           device class circuit.

1       32.   The data processing system of Claim 23, wherein said circuitry for  
2   obtaining a description of at least one device in a docking station from the docking  
3   device class circuit further comprises:  
4           circuitry for obtaining a list of devices under the control of the docking device  
5           class circuit.

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1       33. The data processing system of Claim 32, wherein said circuitry for  
2 obtaining a list of devices under the control of the docking device class circuit further  
3 comprises:

4             circuitry for obtaining a list of devices under the control of a general purpose  
5             I/O device under the control of the docking device class circuit.

1       34. The data processing system of Claim 32, wherein said circuitry for  
2 obtaining a list of devices under the control of the docking device class circuit further  
3 comprises:

4             circuitry for obtaining driver code appropriate to the at least one device.

1       35. The data processing system of Claim 32, wherein said circuitry for  
2 obtaining a list of devices under the control of the docking device class circuit further  
3 comprises:

4             circuitry obtaining driver code appropriate to the docking device class circuit.

1       36. The data processing system of Claim 32, wherein said circuitry for  
2 obtaining a list of devices under the control of the docking device class circuit further  
3 comprises:

4             circuitry for obtaining driver code combination set appropriate to both the  
5             docking device class circuit and the at least one device.

1       37. The data processing system of Claim 23, wherein said circuitry for  
2 obtaining a description of at least one device in a docking station from the docking  
3 device class circuit further comprises:

4             circuitry for obtaining a bus description table from the docking device class  
5             circuit.

1       38. The data processing system of Claim 37, wherein circuitry for  
2 obtaining a bus description table from the docking device class circuit further  
3 comprises:

4             circuitry for obtaining a description of at least one Peripheral Component  
5             Interconnect bus resident within a docking device, or at least one

6           Universal Serial Bus resident within a docking device, or at least one  
7           Accelerated Graphics Port Bus resident within a docking device, or at  
8           least one AT bus resident within a docking device, or at least one  
9           proprietary bus, or at least one wireless bus, or at least one optical bus.

1       39. A program product comprising:  
2           program code for detecting a docking device class circuit present on a bus; and  
3           program code for obtaining a description of at least one device in a docking  
4           station from the docking device class circuit; and  
5           signal bearing media bearing said means for detecting and said means for  
6           obtaining.

1       40. The program product of Claim 39, wherein said signal bearing media  
2           further comprises recordable media or transmission media.

1       41. The program product of Claim 39, further comprising:  
2           said signal bearing media further bearing program code for controlling the at  
3           least one device via commands appropriate to the bus.

1       42. The program product of Claim 41, wherein the bus comprises at least  
2           one Universal Serial Bus, at least one Peripheral Component Interconnect Bus, or at  
3           least one AT bus, or at least one wireless bus, or at least one optical bus.

1       43. The program product of Claim 41, wherein said program code for  
2           controlling the at least one device via commands appropriate to the bus further  
3           comprises:  
4           program code for controlling at least one device associated with docking.

1       44. The program product of Claim 41, wherein said program code for  
2           controlling the at least one device via commands appropriate to the bus further  
3           comprises:  
4           program code for controlling at least one power supply in a docking station.

1       45. The program product of Claim 44, wherein said program code for  
2           controlling at least one power supply in a docking station further comprises:

3           program code for activating a power supply having voltage appropriate to a  
4           portable computer system.

1       46. The program product of Claim 41, wherein said program code for  
2       controlling the at least one device via commands appropriate to the bus further  
3       comprises:

4           program code for controlling at least one power rail that supplies power to a  
5           portable computer system.

1       47. The program product of Claim 39, wherein said program code for  
2       detecting a docking device class circuit present on a bus further comprises:

3           program code for detecting an identifier associated with the docking device  
4           class circuit.

1       48. The program product of Claim 47, wherein said program code for  
2       detecting an identifier associated with the docking device class circuit further  
3       comprises:

4           program code for detecting an identification number reserved for the docking  
5           device class circuit.

1       49. The program product of Claim 39, wherein said program code for  
2       obtaining a description of at least one device in a docking station from the docking  
3       device class circuit further comprises:

4           program code for obtaining a list of devices under the control of the docking  
5           device class circuit.

1       50. The program product of Claim 49, wherein said program code for  
2       obtaining a list of devices under the control of the docking device class circuit further  
3       comprises:

4           program code for obtaining a list of devices under the control of a general  
5           purpose I/O device under the control of the docking device class  
6           circuit.

1       51. The program product of Claim 49, wherein said program code for

2 obtaining a list of devices under the control of the docking device class circuit further  
3 comprises:

4 program code for obtaining driver code appropriate to the at least one device.

1 52. The program product of Claim 49, wherein said program code for  
2 obtaining a list of devices under the control of the docking device class circuit further  
3 comprises:

4 program code for obtaining driver code appropriate to the docking device class  
5 circuit.

1 53. The program product of Claim 49, wherein said program code for  
2 obtaining a list of devices under the control of the docking device class circuit further  
3 comprises:

4 program code for obtaining driver code combination set appropriate to both  
5 the docking device class circuit and the at least one device.

1 54. The program product of Claim 39, wherein said program code for  
2 obtaining a description of at least one device in a docking station from the docking  
3 device class circuit further comprises:

4 program code for obtaining a bus description table from the docking device  
5 class circuit.

1 55. The program product of Claim 54, wherein said program code for  
2 obtaining a bus description table from the docking device class circuit further  
3 comprises:

4 program product for obtaining a description of at least one Peripheral  
5 Component Interconnect bus resident within a docking device, or at  
6 least one Universal Serial Bus resident within a docking device, or at  
7 least one Accelerated Graphics Port Bus resident within a docking  
8 device, or at least one AT bus resident within a docking device, or at  
9 least one proprietary bus, or at least one wireless bus, or at least one  
10 optical bus.